

Remarks and Arguments

Claims 55-62, 67-68, 70, 72-73, 76, and 78-79 are under examination with the entry of this Amendment. Claims 1-54, 69, 71, 74-75, and 77 have been canceled without prejudice. Claims 63-66 have been withdrawn as non-elected claims. Claims 55-58, 59-62, 67-68, 72-73, and 76 have been amended to better claims the subject matter which Applicants regard as the invention and for improved clarity. Claim 79 is a rewritten version of claim 75 which has been canceled. Support for the claim amendments is found throughout the Specification including the claims. New title and new abstract are submitted herewith. The Specification has been amended to correct inadvertent typographical errors and to delete the cited hyperlinks. No new matter has been added with this Amendment.

Also submitted are newly executed Joint Inventors' Declaration for Patent Application and Power of Attorney and Formal Drawings as requested by the Examiner.

Claim Objections:

The issues raised in the Office Action have been addressed in the present Amendment. For example, claim 76 has been amended to correct improper multiple dependency. Claims 69 and 77 have been canceled without prejudice.

The Office Action states that claims 67-68 are of improper dependent form for failing to further limit the subject matter of the base claim (i.e., claim 55). Applicants point out that the base claim (claim 55) recites that the polypeptide of SEQ ID NO: 8 has activity against a plant pest and the dependent claims (claims 67 and 68) specify that the plant pest be either an insect or a fungus. As indicated in the Specification (page 1, line 12), plant pests can be insects, microorganisms, fungi, viruses and the like.

Accordingly, claims 67 and 68 are of proper dependent form specifying that the plant pests be one specific type.

Claim Rejections under 35 U.S.C. 112:

Claims 55-57, 60-61, 67-70, and 72-75 are rejected under 35 U.S.C. 112, first paragraph, on the basis that the Specification allegedly does not enable any person skilled in the art to make and/or use the invention commensurate in scope with the claims. Applicants respectfully traverse this rejection.

The Office Action alleges that while the Specification is enabling for nucleic acids encoding SEQ ID NO:18, plant cells, plant parts, and plants transformed with it and a method of using it to induce plant pest resistance in a plant, it does not enable a person skilled in the art to use a nucleic acid encoding SEQ ID NO:8 to do the same. The basis for this allegation is that the mature protein (SEQ ID NO:8) made from SEQ ID NO:18, in which the N-terminal sequence and the C-terminal sequence have been removed, is a thionin-like protein synthesis inhibitor which would be toxic to the plant if found in the cytoplasm. The Office Action alleges further that the Specification does not teach how to overcome the toxicity of expressing a nucleic acid encoding only SEQ ID NO:8 in a plant.

Applicants do not agree with the Examiner's allegation. Applicants point out that the expression of the peptide as set forth in SEQ ID NO:8 would not be toxic because this protein has four disulphide bonds, which are necessary for activity, and these disulphide bonds would not form in the cytoplasm of the plant cell.

However, in the interest of advancing prosecution of this case, claim 55 has been amended without acquiescing to this rejection. Amended claim 55 specify a nucleic

acid molecule comprising a sequence encoding the peptide of SEQ ID NO:8 and further comprising a nucleotide sequence encoding a C-terminal sequence and/or an N-terminal signal sequence. Such a nucleic acid would not direct expression of the mature protein of SEQ ID NO:8 in the cytoplasm of the plant cell.

Regarding the issues with claims 60-61, these claims have been amended for improved clarity in the present Amendment.

Claims 57-58, 62, 73, and 75 are rejected under 35 U.S.C. 112, second paragraph, as allegedly indefinite for failing to particularly point out and distinctly claim the subject matter.

Without acquiescing to this rejection, claims 57-58, 62, and 73 have been amended to address the issues raised in the Office Action. Claim 75 has been canceled without prejudice.

In summary, based on the above amendments and arguments, Applicants submit that the claims as amended are definite and the Specification does provide enablement for the claimed invention. Withdrawal of the rejections under 35 U.S.C. 112, first and second paragraphs, is respectfully requested.

Conclusion:

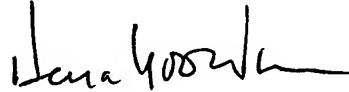
Based on the foregoing, this case is considered to be in condition for allowance and passage to issuance is respectfully requested.

Application. No. 10/072,809
Amendment dated June 10, 2004
Reply to Office Action of March 11, 2004

If there are any outstanding issues related to patentability, the courtesy of a telephone interview is requested, and the Examiner is invited to call to arrange a mutually convenient time.

It is believed that this amendment does not necessitate the payment of any additional fees under 37 C.F.R. 1.16-1.17. If this is incorrect, please charge any deficiency to Deposit Account No. 07-1969.

Respectfully submitted,



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